REMARKS

Claims 1-3, 6 and 7 are pending. No new matter has been added by way of the present amendments. For instance, the amendments made to claims 1 and 6 are supported by the present specification at page 4, lines 12-34, page 5, lines 4-6 as well as the corresponding Figure 2, and page 6, lines 28-30. Accordingly, no new matter has been added.

In view of the following remarks Applicants respectfully request that the Examiner withdraw all rejections and allow the currently pending claims.

Issues Under 35 U.S.C. §103(a)

The Examiner has rejected claims 1-3, 6 and 7 under 35 U.S.C. §103(a) as being obvious over Some et al. (USP 6,256,405 B1) in view of Linsley et al. (USP 6,271,002 B1), Ward et al. (USP 4,711,955) and Isoda et al. (USP 6,255,660 B1). Applicants respectfully traverse this rejection.

Distinctions Between the Present Invention and the Cited Art

All of the cited art, when reviewed individually as well as in combination, fails to suggest or disclose use of a radiation image storage panel having divided stimulable phosphor layers in a process for detecting a complementary DNA fragment. The cited art further fails to suggest or disclose keeping a DNA micro-array in

contact with the radiation image storage panel under such condition that the areas of DNA micro-array, in which groups of probe compounds are fixed, face the divided stimulable phosphor layers of the radiation image storage panel. This will be discussed in detail below.

A review of the Some et al. reference reveals a description of a step of keeping the hybridized DNA in contact with a radiation image storage panel containing a stimulable phosphor, such that the corresponding areas of the stimulable phosphor sheet can absorb and store radiation energy of the radioactive label coming from the fixed DNA fragments. However, the Some et al. reference fails to suggest or disclose the use of a radiation image storage panel having divided stimulable phosphor layers in conjunction with a process for detecting a complementary DNA fragment.

Regarding the Isoda et al. reference, the Examiner has stated that a radiation image storage panel having divided stimulable phosphor layers was known by Isoda et al. However, Applicants submit that the cited Isoda et al. reference fails to suggest or disclose the use of a radiation image storage panel in conjunction with a process for detecting a complementary DNA fragment. However, it is exactly such a process, in particular a process for detecting a complementary DNA fragment, which is currently being claimed.

Applicants would like to further point out that neither the

Some nor the Isoda reference suggest or disclose a step of keeping the DNA micro-array in contact with the radiation image storage panel having divided phosphor layers under such condition that the areas of DNA micro-array in which groups of the probe compounds are fixed face the divided stimulable phosphor layers of the radiation image storage panel, whereby the divided stimulable phosphor layers absorb and store radiation energy of the radioactive label coming from the DNA fragments fixed to the DNA micro-array. The mode of combining the DNA micro-array and the radiation image storage panel in the above-mentioned manner is advantageous for obtaining a radiation image which is almost free from noise caused by labeled non-complementary DNA fragments inadvertently fixed to the DNA micro-array. Further, resolution of the radiation image is improved. This is due to the fact that almost all of radiation energy emitted by the DNA fragments fixed to one area of the DNA micro-array is absorbed only by one of the divided phosphor layer facing the above-mentioned area of the DNA micro-array.

Concerning the additional cited references of Linsley and Ward, Applicants point out that neither of these references even suggest or disclose the use of a radiation image storage panel. Thus, these secondary references fail to cure the deficiencies discussed above.

Accordingly, when the Examiner's references are viewed in combination, Applicants respectfully submit that there exists no

grounds for rejecting the present claims. For instance, none of the cited references suggest or disclose the currently claimed limitations, for instance, the use of a radiation image storage panel which has divided stimulable phosphor layers containing a stimulable phosphor in a process for detecting a complementary DNA fragment. The references further fail to suggest or disclose keeping the DNA micro-array in contact with the radiation image storage panel under such condition that the areas of DNA micro-array, in which groups of the probe compounds are fixed, face the divided stimulable phosphor layers of the radiation image storage panel. Accordingly, the Examiner has failed to present a *prima facie* case of obviousness. Reconsideration and withdrawal of the outstanding rejection is respectfully requested.

In view of the above, Applicants respectfully submit that the present claims define subject matter which is patentable over the cited art. Issuance of a Notice of Allowability is respectfully requested.

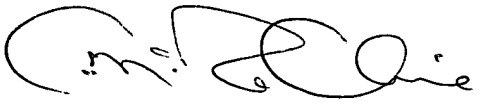
If the Examiner has any questions or comments, please contact Craig A. McRobbie, Registration No. 42,874 at the offices of Birch, Stewart, Kolasch & Birch, LLP.

Pursuant to the provisions of 37 C.F.R. §§ 1.17 and 1.136(a), the Applicants hereby petition for an extension of three (3) months to January 8, 2004 in which to file a reply to the Office Action. The required fee of $950.00 is enclosed herewith.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 

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